

AMENDMENT TO THE CLAIMS

1-3. (Cancelled)

4. (Currently amended) A semiconductor light-emitting device comprising:

a collector layer and an emitter layer ~~first and second semiconductor layers~~ each of a first ~~p-type~~ conductivity type; and

a base ~~third semiconductor~~ layer of a second ~~an n-type~~ conductivity type provided between the collector layer and the emitter layer ~~first and second semiconductor layers~~, the base ~~third semiconductor~~ layer having a ~~forbidden band as an electron energy band gap~~ which is smaller ~~in width~~ than a ~~forbidden band gap~~ in each of the collector layer and the emitter layer ~~first and second semiconductor layers~~,

a collector electrode connected to the collector layer,

an emitter electrode connected to the emitter layer,

the base ~~third semiconductor~~ layer emitting light with charge injected therein from the emitter layer and a base electrode ~~second and third semiconductor layers~~, and the ~~an energy value at an upper end of a valence band as an electron energy band gap in the collector layer~~ being larger ~~lower in the first semiconductor layer than the band gap in the emitter layer in the~~ second semiconductor layer.

5. (Currently amended) The semiconductor light-emitting device of claim 4, wherein an impurity concentration in the emitter ~~second semiconductor~~ layer is higher at least in a region thereof opposed to the collector ~~first semiconductor~~ layer than in the collector ~~first semiconductor~~ layer.

6-11. (Cancelled)

12. (New) The semiconductor light-emitting device of claim 4, wherein both the emitter layer and the collector layer are composed of AlGaAs, and the collector layer contains Al in a larger proportion than in the emitter layer.

13. (New) The semiconductor light-emitting device of claim 4, wherein the first conductivity type is p-type, and the second conductivity type is n-type.

14. (New) The semiconductor light-emitting device of claim 4, wherein the first conductivity type is n-type, and the second conductivity type is p-type.